

# **DCTA A-Train Friday Nights**

## *Are things as bad as they seem?*

**Kevin Roden**  
**Denton City Council, District 1**

### **Summary**

City Council was provided with Informal Staff Report 11-092 which provided data and analysis from DCTA regarding A-Train ridership among the various types of service. The analysis tended to paint a picture of a low performing Friday night train as compared to a Monday through Friday commuter train in "high demand".

I am providing another analysis, using the same data, that paints a very different picture. In fact, this analysis shows discretionary ridership consistently out-performing commuter ridership from the perspective of average number of riders per trip.

In addition, I suggest other avenues for analysis that might provide a clearer and more fair comparison.

### **What counts as Friday night service?**

DCTA confines Friday night service to the one-way trips which are beyond the standard Monday through Friday service. Thus defined, Friday night service is made up of a mere 6 one way trips (3 Southbound and 3 Northbound). In fact, to be precise, the final Northbound train leaving Trinity Mills on Friday nights goes only one stop North before stopping for the night, thus reducing this number to only 5 *full* one-way trips.

From the point of view of distinguishing this additional service from the standard weekday schedule, it makes sense to classify Friday night service as such. But from the point of view of your average Friday night discretionary rider, restricting it to these times is arbitrary and potentially misleading for the purposes of tracking true ridership statistics.

For instance, Southbound Friday night riders are not counted as true Friday night riders unless they leave on or after the 7:41pm train. For Northbound rider statistics, the situation is much worse: they are not counted as true Friday night riders unless they leave on or after 8:56pm. Given the relatively early cut-off time of A-Train service on Friday nights, it stands to reason that most discretionary Friday night riders begin the first half of their round-trip prior to these defined starting points (prior to 7:41pm for Southbound riders and prior to 8:56pm for Northbound riders). Given that there are 5 complete Southbound trips and 6 complete Northbound trips happening after 5pm on Friday nights, yet BEFORE the times in which DCTA begins counting Friday night riders, it seems that a clear picture of actual Friday night discretionary riders has yet to be understood according to the current DCTA analytics.

## **What is being compared?**

A determination of the success or failure of Friday night service assumes a clear and fair basis of comparison. Simply comparing total numbers of riders by type of service is misleading, for the number of trips varies by type of service.

One way to approach this might be to determine and compare the **average ridership per trip** among the various types of A-Train service. Abstracting from the previous analysis of precisely what should count as Friday night service and using the current definition (which should be understood as very conservative based on the previous arguments), consider the following.

I will be using the data provided by DCTA on 12/15/11 showing total weekly ridership broken down by day and type of service to provide a comparison based on the number of average passengers per trip.

### ***This analysis includes the following facts:***

- Data is drawn from ridership statistics between the weeks of June 27 and December 5, 2011 - a total of 24 weeks.
- Monday through Friday commuter service involved 45 one-way trips per day, 225 one-way trips per week, and 5400 total one-way trips over the course of this 24 week analysis.
- Friday night service involved 5 one-way trips per week and 120 total one-way trips over the course of this 24 week analysis.
- Saturday service involved 18 one-way trips per week and 432 total one-way trips over the course of this 24 week analysis.

	Total Passengers	Total One Way Trips	Average # of passengers per trip	% comparison to M-F commuter service
M-F Commuter Service	157,947	5400	29.2	Baseline for comparison
Friday night	1736	120	14.5	49.7% of M-F commuter service
Saturday	20,820	432	48.2	65% MORE than M-F commuter service
Friday Night and Saturday combined	22,556	552	40.9	40% MORE than M-F commuter service

This analysis paints a remarkably more optimistic picture. Even assuming the restricted definition of Friday night service, this shows that Friday night service is transporting nearly 50% of the average passengers per one-way trip of typical M-F commuter service. If the analysis allowed for a broader understanding of Friday night riders, it seems reasonable that this percentage would increase.

Saturday service is consistently out-performing standard Monday through Friday commuter service by averaging 65% more riders per trip. Even folding in the statistics from Friday night service paints a picture of **A-Train total discretionary ridership out-performing traditional commuters by averaging 40% more riders per trip.**

This brings up a key point on how to analyze the success or failure of a particular type of A-Train service. The proposal for Friday night service was never understood separately from the proposal for Saturday service. In fact, the arguments prior to the approval of the current levels of service understood the two together as "discretionary service" as opposed to "commuter service". An argument, therefore, can be made to include Friday night and Saturday service together in order to understand the bigger picture market for discretionary A-Train service. And from that perspective, with the total

discretionary services consistently out-performing standard commuter service by 40% (from the point of view of average passengers per trip), it seems the case has been made for such service.

## **Analysis of Fares**

Another way to get a more substantial picture of the success of various types of service would be to better track the types of fares that are being used by riders during the different types of train service. One could assume that a good portion of regular commuters are taking advantage of some sort of reduced fare options. In the case of university students who take advantage of the university pass, their fare breaks down to about \$3 per day. University faculty or staff taking advantage of the university pass pay only \$4.50 on average per day.

A key question: do discretionary riders (Friday night and Saturday) tend to be full-fare paying customers? Cross-analyzing such fare data with the previous average rider per trip comparison would be instructive. From that point of view, we could have a clearer picture of the **average revenue per one-way trip** as compared across different types of A-Train service.

For instance, if it was determined that the average commuter rider paid \$5 per day while the average discretionary rider paid \$8 per day (under the merely anecdotal assumption that discretionary riders are more likely to pay full fare), this would be another positive sign for the success of discretionary service. It is possible that discretionary service is bringing in more revenue, on average, per one-way trip. Further analysis and data would be needed to investigate this possibility.